DSUII Digital Telephone System

Video Display Terminal Programming Manual

For J0408, J0816, J1632 Common Equipment Cabinets

This publication discusses DSU II software features available through release 5A.

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1 Introducing VDT Programming

Using This Book

This publication provides instruction for programming a digital telephone system, or Digital Service Unit (DSU II), using a Video Display Terminal (VDT). You can use a personal computer that is running a terminal emulation software program as a VDT if desired (See pages 2 and 3). Refer to the DSU II Digital Telephone System Manual, IMI66-132, section 2.12 for a detailed discussion about VDT connection and use.

We have preprogrammed the telephone system to a user-oriented set of operational parameters known as ***default values***. In *many* cases, these values will provide operating conditions that are completely acceptable to the site requirements. With these defaulted values, the system is completely operational as soon as you install and apply power to it. On those occasions where the default values do not fit the site requirements, you can reprogram the system to customize the operational parameters to meet those requirements.

NOTE: *For several of the VDT programming functions, you must use different menus to completely program the function. For example, Toll Restriction is done on the Station C.O.S. menu, the Line C.O.S. menu and the Toll Restriction menu. If you are unsure about a particular function, check the index in the back of the book for all page listings for that function.*

Knowing The Programming Commands

Description: The on-screen programming is menu driven and fairly self explanatory. The following commands will be useful to you in programming the system.

NOTE: *You can obtain all of this information by entering the Information menu, number 5 on the Main menu.*

To Program: To quit a programming procedure, either press **RETURN** (**ENTER** on some VDT keyboards), which returns you to the top of the current menu, or press **CTRL C**, which returns you to the top of the main menu.

To display the help menu (if one is available to you), press the **?** key (the system is waiting at the same prompt line as it was before the help menu was requested).

To print the menu that you are currently using, press the **@** key.

NOTE: *There are also special line edit characters that you will need to know.*

To cause the current response line to be echoed for review press **CTRL R**.

To cause the current response line to be deleted, press **CTRL D.**

To cause class of service data printout to stop scrolling so that it can be viewed, press **CTRL S**.

To cause class of service data printout to resume, press any key**.**

Operating A Personal Computer

The following procedure is given as a typical example for using a PC and an XMODEM-type communications software program to program the digital telephone system. It is only provided for illustration and reference purposes and describes a set-up using a typical communications software program known as *PROCOMM* ™ (produced by Datastorm Technologies, Inc.), and the other known as HYPERTERMINAL™ (developed for Microsoft by Hilgraeve Inc.). Many other communications software programs are also available that you can use for this purpose. While individual operating procedures will vary with different communications software programs, the general process is similar to this.

Perform turn-on and program-load procedures. If operating through modems, take action to establish a communications link between the PC and the digital telephone system.

If you have direct connected your PC to the digital telephone system, match the data communications parameters of the software program to those now programmed at the digital telephone system.

If you are employing remote programming, match the data parameters of the PC to the modem connected to it. The modem connected to the digital telephone system must match its data parameters as well.

NOTE: Remember, 8-bit data is required for XMODEM protocol. If the digital telephone system is not now programmed to provide 8-bit data, you will have to reprogram it from station 10 before remote data communications can take place. You should set the baud rate to match the modem or the PC at the same time.

Setting The Data Communication Parameters on a PC

Description: The data communication parameters are those parameters (baud rate, stop bits, data bits) for the DSU II.

***NOTE**: Remember, the baud rate setting of the PC or data terminal, the data modems, and the digital telephone system must be the same. Always change the programming parameters of the DSU II first, then the programming terminal.*

To Program Procomm™:

1. Once in *PROCOMM*™ Press **ALT P**
2. Press **11** and RETURN (This action selects a baud rate of 9600 baud)
3. Press **17** and RETURN (This action selects 8-bit data)
4. Press **18** and RETURN (This action selects one stop bit)
5. Press **24** and RETURN (This action saves the data parameters)

To Program Hyperterminal™

1. Once in *HYPERTERMINAL*™ choose **Properties** from the **File** menu
2. Choose the com port you are using and click on the **Configure** button.
3. Using the mouse select a baud rate of **9600 baud**
4. Using the mouse set Data Bits to **8**
5. Using the mouse set Parity to **None**
6. Using the mouse set Stop Bits to **1**
7. Using the mouse set Flow control to **None**

Setting The Terminal Parameters

Description: ***The Terminal parameters are the matching parameters for the DSU II. Remember, all of them must be the same as they are for the DSU II.***

NOTE*: Setting the terminal emulation for a Wyse-50 or VT-100 emulation will provide a compatible set of default values; however, any emulation which provides full duplex operation is satisfactory.*

To Program Procomm™:

1. Once in *PROCOMM*™ Press **ALT S**
2. Press **2** and RETURN
3. Press **1** and RETURN
4. Use arrow keys to select VDT-100 or similar emulation then press RETURN
5. Press **ESC** to finish
6. Press **S** and RETURN (This action saves the terminal parameters)
7. Press **ESC** and RETURN to end the terminal parameter set up

To Program Hyperterminal™:

1. Once in *Hyperterminal*™ click on the **Settings** tab
2. Use the mouse or keyboard to choose VT100 or similar emulation and click on OK

Programming The System and Loading or Saving The Data Base

Description: When programming from a remote personal computer, you will need to load and / or save your programming decisions. This is not available as a feature if you are programming via a Wyse 50 terminal.

To Program:

1. Press the RETURN or ENTER key for a prompt for password, type **I ✳ 7 4 6 ✳** then press RETURN (This causes main COS programming menu to be displayed)
2. From main menu, make all selections necessary to perform class of service programming then return to the main menu.
3. From main menu, press **1** and RETURN (This causes system COS programming menu to be displayed)
4. From the system menu, press **4** and RETURN (This causes load/save menu to be displayed. From load/save menu, down-load C.O.S. data from digital telephone system to computer or up-load C.O.S. data from computer to digital telephone system)
5. Down-Load C.O.S. Data From Digital Telephone System To PC
   A. Press **1** and RETURN
   B. Press **PAGE DOWN** (**Procomm™**)
      —OR—
      Choose **Receive file** from the **Transfer** menu (**Hyperterminal™**)
   C. Press **1** to choose XMODEM protocol (**Procomm™**)
      —OR—
      Use the mouse to choose XMODEM protocol (**Hyperterminal™**)
   D. Type file name for down-loaded C.O.S. data and include destination drive:\directory (for example, A:\ cust-001)
   E. Press RETURN. The C.O.S. data, as programmed in the digital telephone system, is automatically down-loaded to the computer file
6. Up-Load C.O.S. Data From PC To Digital Telephone System
   A. Press **2** then RETURN
   B. Press **PAGE UP** (**Procomm™**)
      —OR—
      Choose **Send file** from the Transfer menu (**Hyperterminal™**)
   C. Press **1** to choose XMODEM protocol (**Procomm™**)
      —OR—
      Use the mouse to choose XMODEM protocol (**Hyperterminal™**)
   D. Type file name of saved C.O.S. data—include source drive if necessary
   E. Press RETURN. The C.O.S. data, as stored in the computer file, is automatically up-loaded to the digital telephone system
7. From load/save menu, press **3** to down-load currently stored auto dial and speed dial numbers
   —OR—
   press **4** to up-load them
8. If transfer is completed properly, screen will display “Xmodem transfer complete, no errors.”
9. Return to main menu and log off

Using the Password

Description: The system provides two different entry levels for programming and allows for a different password for each entry. You must use the VDT programming method to change them as needed to provide security against unauthorized program entries. The two programming entry levels are the installer level and the administrator level. You enter the installer level, using the installer password, to perform all programming functions including major changes such as master clearing or line type programming. Administrators enter the administrator level, using the administrator password, to perform most programming functions except those major changes just mentioned. You can make the two passwords different to limit access to either programming level to only certain special or authorized people. Additionally, you can construct a password that will prevent all C.O.S. programming entry from station 10.

Default Passwords

The default passwords are detailed in the following list:

VDT Installer	I*nnn* (nnn = 746)
VDT Administrator	I*nnn* (nnn = 236)
Station 10 Installer	INTERCOM *#nnn* (nnn = 746)
Station 10 Administrator	INTERCOM #nnn* (nnn = 236)

Customized Passwords

Customized passwords can be alpha-numeric or numeric only (no spaces allowed) and must contain six characters. To retain the ability to enter programming from station 10, you must maintain the I*nnn* format in the VDT password and you must enter only numbers in the nnn entry; however, you must not enter a zero for the leading **n**.

Once you customize a password, it remains customized and you must use the new password to gain entry into the system for future programming tasks. Neither default nor master clear will erase the customized password. It is very important that you keep a hard copy of the customized password since it provides the only entry to system C.O.S. programming through either the VDT or station 10. If no one can remember the customized password, Comdial's Technical Services Department can provide emergency entry *but it charges a fee for this service*. Otherwise, you must disconnect all AC power and any battery back-up equipment, wait an extended period of time (up to several weeks) for the internal memory protection to completely discharge, and reprogram the system using the default password to gain entry.

NOTE: Password protection programming is a Video Display Terminal feature only. You can not customize a password using station 10 programming entry.

Master Clearing the System

Before you begin any programming, you can master-clear the system. Master-clearing returns the entire system to default conditions. You must master-clear a new system prior to programming the C.O.S. database.

NOTE: Do not do this unless you want to clear all of the programming.

Description: Returns entire system configuration to factory settings *and clears all stored auto and speed dial numbers.*

To Program:

1. Key in the password **I*746*** (this will get you into the main menu) and RETURN
2. Press **1** for System C.O.S. and RETURN
3. Press **1** for System Defaults and RETURN
4. Press **8** for Master Clear System Data and RETURN
5. Press **Y** to confirm and RETURN
6. Press **CTRL C** to return to main menu and RETURN

2 Programming The System

Using Chapter Two

Programming the customer's new system is the most intricate and important aspect of the installer' s job. Chapter Two deals only with the programming of the system, which means you are setting the parameters *that will be true for the entire system. If* you are unsure whether or not you are programming the correct function, check the features chapter of IMI66-132 DSU II Digital Telephone System Manual for a full definition of the features. You should make a record *of* all your programming decisions-it will help you keep track of what you have done and will help you trouble-shoot any problem that might arise later. When you need to make a record of your programming decisions, use the records sections provided in IMI66-132 DSU II Digital Telephone System Manual, or print out C.O.S. data to the printer port for either a hard copy or a text file.

- ***To Enter the System Class of Service menu, Press 1 on the Main menu***

Defaulting The System

- ***To Enter System Defaults menu, Press 1 on System C.O.S. menu.***

Default All System Data

Description: Returns all system C.O.S. values to default except for baud rate.

To Program:
1. Press **1** on System Defaults menu and RETURN
2. Press **Y** to confirm and RETURN
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Default All Line Data

Description: Returns all lines to default.

To Program:
1. Press **2** on System Defaults menu and RETURN
2. Press **Y** to confirm and RETURN
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Default All Station Data

Description: Returns all stations to default.

To Program:
1. Press **3** on System Defaults menu and RETURN
2. Press **Y** to confirm and RETURN
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Default Selected Station Data

Description: Returns selected stations to default.

To Program:
1. Press **4** on System Defaults menu and RETURN
2. Enter desired station numbers (10, 11, 12, . . .57) and RETURN
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Pulse Dial on All Lines

Description: Makes all lines pulse dialing, not DTMF.

To Program:
1. Press **5** on System Defaults menu and RETURN
2. Press **Y** to confirm and RETURN
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Tone Dial on All Lines

Description: Makes all lines tone dial, DTMF.

To Program:
1. Press **6** on System Defaults menu and RETURN
2. Press **Y** to confirm
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Default Button Mapping on Stations

Description: Returns all telephones to default.

To Program:
1. Press **7** on System Defaults menu and RETURN
2. Press **Y** to confirm
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

Master Clear System Data

Description Returns system to factory settings.

To Program:
1. Press **8** on System Defaults menu and RETURN
2. Press **Y** to confirm

Default Toll Restriction Tables

Description Returns all toll tables to default.

To Program:
1. Press **9** on System Defaults menu and RETURN
2. Press **Y** to confirm
3. Press **CTRL C** to return to main menu or RETURN to go back to System C.O.S. menu.

System Options

- ***To Enter System Options menu, Press 2 on System C.O.S. menu.***

Voice / Tone First on Intercom

Description: Selects either voice or tone as standard intercom signaling method.

To Program:
1. Press **1** on System Options menu and RETURN
2. Press **1** for Voice First

—OR—

Press **2** for Tone First and RETURN

3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Station Message Desk

Description: Assigns or clears one station port as the central message desk.

To Program:
1. Press **2** on System Options menu and RETURN
2. Press **1** to clear or **2** to assign Message Desk and RETURN
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Change Extension Number of Station

Description: Gives a station a different extension number from 2-4 digits.

To Program:
1. Press **3** on System Options menu and RETURN
2. Enter old extension number and RETURN
3. Enter new extension number and RETURN (be sure that the new extension number is not assigned to another station)
4. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Assign Pilot Number to Department

NOTE: See index for all department–level programming steps.

Description: Gives an entire department one extension number.

To Program:
1. Press **4** on System Options menu and RETURN
2. Enter department number (1-4) and RETURN
3. Enter **PILOT** number and RETURN
4. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Music on Hold

Description: Enables or Disables the music on hold feature.

To Program:
1. Press **5** on System Options menu and RETURN
2. Press **0** to the Enable music on hold feature

   —OR—

   Press **1** to Disable the music on hold feature
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Do Not Disturb Inhibit

Description: Inhibits station users from setting do not disturb on their telephones.

To Program:
1. Press **6** on System Options menu and RETURN
2. Press **0** to Enable Do Not Disturb

   —OR—

   Press **1** to Disable Do Not Disturb
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Station Monitoring

Description: A B.F. flashes at the programmed station when another station is receiving a call, and you can answer that call by selecting the flashing DSS.

To Program:
1. Press **7** on System Options menu and RETURN
2. Press **1** to Enable Station Monitoring

   —OR—

   Press **0** to Disable Station Monitoring
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Tandem Attendant

Description: Allows one or both attendants to receive timed hold recall and recall from transfer.

To Program:
1. Press **8** on System Options menu and RETURN
2. Press **1** to Enable Tandem Attendants,

   —OR—

   Press **0** to Disable Tandem Attendants
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Voice Mail Auto Transfer

Description: Enables immediate line transfer when voice mail unit is included with system.

To Program:
1. Press **9** on System Options menu and RETURN
2. Press **1** to Enable Voice Mail Auto Transfer

   —OR—

   Press **0** to Disable Voice Mail Auto Transfer
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Disable Stations

Description: Disables station ports.

To Program:
1. Press **10** on System Options menu and RETURN
2. Press **1** to Enable stations and enter station number

   —OR—

   Press **2** to Disable stations and enter station number
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

System Alarm Reporting

Description: The system can send special system alarm code signals to selected stations' LCD screens.

To Program:
1. Press **11** on System Options Menu and RETURN
2. Press **1** to Enable Alarm Reporting

   —OR—

   Press **0** to Disable Alarm Reporting
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

P.A. Options

Description: Enables all PA options

To Program:
1. Press **12** on System Options menu and RETURN
2. Press **1** to Enable or **2** to Disable Direct Ringing and enter line number
3. Press **3** to Enable or **4** to Disable Delayed Ringing and enter line number
4. Press **5** to Enable or **6** to Disable Night Ringing and enter line number
5. Press **9** to Assign or **10** to Clear PA zones and enter zone number
6. Press **11** to Assign Audible Relay to PA or **12** to Assign Audible Relay to station 17
7. Press **13** to assign a PA ringer tone
8. Press **14** to **RETURN** to previous menu.

SOHVA Tones

Description: You can set the number of SOHVA tones from one to six tone bursts. The default for this option is six.

To Program:
1. Press **13** on System Options menu and RETURN
2. Enter number of SOHVA tones (1–6) and RETURN
3. Press **CTRL C** to return to main menu, or RETURN to go back to previous menu.

Allow Ringer Off

Description: You can allow users to turn off the ringer volume on their telephone by using the volume control.

To Program:
1. Press **14** on System Options menu and RETURN
2. Press **1** to enable or **0** to disable.

Tracker Options

Description: If you equipped your system with the Tracker Pager feature, you need to program these options.

To Program:
1. Press **15** on System Options menu and RETURN
2. Press **1** to enable Tracker
3. Press **2** to disable Tracker
4. Press **3** to display the number of Tracks
5. Press **4** to clear the number of Tracks.

System Speed Dial

Description: The system speed dial is a system-wide list of numbers that all users can access for automatic dialing. Those users with two-line display LCD speakerphones can scroll through the list of names that you assign to the system speed dial numbers using their speakerphone's display. After scrolling through the list, they can pick the name they wish to call, and automatically dial the number assigned to the name. The system scrolls this index of names in the sequence that you or the attendant sorted the entries; therefore, be sure to arrange the entries in a sequence that best meets the system user's needs.

To Program:
1. Press **16** on System Options menu and RETURN
2. Enter Location (01-99)
3. Enter Preselect (Lines L1-L24, Line group G1-G4, I for Intercom, or P for Prime)
4. Enter Digits (MAX 32):

Visual Voice Mail

Description: Visual Voice mail (VVM) support provides proprietary, two-line display LCD speakerphone stations with visual messages and interactive buttons. This message and button functionality enhances the station’s use with Voice Processing (VP) equipment.

To Program:
1. Press **17** on System Options menu and RETURN
2. Enter **1** to Enable VVM Feature, **0** to Disable

Voice Mail Pause

Description: Some voice mail systems allow you to program a pause before they dial an extension number. You can program the digital telephone system to pause before receiving digits from a voice mail system. This capability allows the digital telephone system to match the voice mail system's pause. If the voice mail system does not pause before dialing an extension number, you must disable the fixed one second pause in the digital telephone system.

To Program:
1. Press **18** on System Options menu and RETURN
2. Enter **1** to Turn on Voice Mail Pause, **0** to Turn off

System CFOS

Description: Call Forward Outside System (CFOS) gives station users the ability to forward line calls to a location outside the DSU II Digital Telephone System. Be sure to set the abandon hold release time on all lines that you use for CFOS to match the C.O. abandon hold release time.

To Program:
1. Press **19** on System Options menu and RETURN
2. Enter **1** to Enable System CFOS Feature, **0** to Disable

DCD Type Ring All Stations

Description: Enabling the system-wide ring all DCD feature causes a transferred call to ring at all idle stations in a department until it is answered. The answering station gets the call while the remaining stations retain their original status.

To Program:
1. Press **20** on System Options menu and RETURN
2. Enter **1** to Enable Ring All on Transferred Line, **0** to Disable

DCD Type Longest Idle Distribution

Description: Enabling the system-wide longest idle DCD feature causes any call to a department to ring at the station that has been idle for the longest period of time. If the station is in DND mode, the call rings the next longest-idle station.

Default = disabled

To Program:
1. Press **21** on System Options menu and RETURN
2. Enter **1** to Enable DCD Ring Longest Idle Station, **0** to Disable

Ringback On Transfer

Description: With Ringback On Transfer enabled, when an outside call is transferred to another station, the system gives ringback to the outside caller instead of music on hold. This feature is disabled at default.

To Program:
1. Press **22** on System Options menu and RETURN
2. Enter **1** to Enable Ring Back on Transfer, **0** to Disable

System Timing

- ***To enter System Timing Menu, Press 3 on System C.O.S. menu.***

Recall / Tap Time

Description: The system can generate either a line disconnect (Recall) or a shorter disconnect (Tap). Tap is used as a signaling device for CENTREX / PBX and is not a long enough signal to disconnect from the system.

To Program:
1. Press **1** on System Timing menu and RETURN
2. Press **1-10** to select appropriate Recall / Tap time and RETURN
3. Press **11** to RETURN to previous menu.

Pause Time

Description: During Auto Dials and Speed Dials, it is sometimes necessary to include a pause in the middle of the dialing in order to give the receiving equipment enough time to receive the signals. The user includes a pause in setting an Auto Dial or Speed dial by pressing the HOLD button. The pause time determines the length of that pause.

To Program:
1. Press **2** on System Timing menu and RETURN
2. Press **1-10** to select appropriate Pause time and RETURN
3. Press **11** to RETURN to previous menu.

Timed Hold Recall Time

Description: After a call has been placed on hold for a set length of time, the system will recall the station that placed the call on hold.

To Program:
1. Press **3** on System Timing menu and RETURN
2. Press **1-10** to select appropriate Timed Hold Recall time and RETURN
3. Press **11** to RETURN to previous menu.

Transfer Recall Time

Description: A transferred call that remains unanswered after a set length of time will return to the transferring station for answering.

To Program:
1. Press **4** on System Timing menu and RETURN
2. Press **1-10** to select appropriate Transfer Recall time and RETURN
3. Press **11** to RETURN to previous menu.

Department Transfer Recall Time

Description: A call that is transferred to a department and remains unanswered after a set length of time will return to the transferring station for answering.

To Program:
1. Press **5** on System Timing menu and RETURN
2. Press **1-10** to select appropriate Department Transfer Recall time and RETURN
3. Press **11** to RETURN to previous menu.

Call Park Recall Time

Description: A call that remains in a parking orbit for a set length of time automatically returns to a timed hold recall condition at the parking station.

To Program:
1. Press **6** on System Timing menu and RETURN
2. Press **1-7** to select appropriate Call Park Recall time and RETURN
3. Press **8** to RETURN to previous menu.

DTMF Extended Dialing

Description: When a telephone user dials a number automatically (autodial, saved number redial, for example) the duration of the DTMF tones are determined by the user. This function is useful when automatically dialed numbers access answering machines or bank computers, for example, that require longer than standard DTMF tones.

To Program:
1. Press **7** on System Timing menu and RETURN
2. Press **1-13** to select appropriate DTMF Extended Dialing Time and RETURN
3. Press **14** to RETURN to previous menu.

Delayed Ringing Times

Description: You assign delayed ringing to stations for specific lines, you can also set the time length of the delay.

To Program:
1. Press **8** on System Timing menu and RETURN
2. Press **1-10** to make time choice (6 seconds to 1 minute)
3. Press **11** to RETURN

Load / Save C.O.S. Data

- ***To enter Load / Save C.O.S. Data menu, Press 4 on system C.O.S. menu***

NOTE: You must be using a computer to use these functions. This action is not available as a feature if you are programming via a "dumb terminal". These commands are specific to PROCOMM ™ (produced by Datastorm Technologies, Inc.), and HYPERTERMINAL™ (developed for Microsoft® by Hilgraeve Inc. And located on any Microsoft® Windows® destop—Microsoft Corp., Redmond WA).. Remember, Xmodem protocol requires 8 bit, 1 stop bit, in order to function..

Description: When programming from a remote personal computer, you can load and / or save your programming decisions.

To Program:

1. Complete class of service programming then return to the main menu.
2. From main menu, press **1** and RETURN (This causes system COS programming menu to be displayed)
3. From the system menu, press **4** and RETURN (This causes load/save menu to be displayed. From load/save menu, down-load C.O.S. data from digital telephone system to computer or up-load C.O.S. data from computer to digital telephone system)
4. Down-Load C.O.S. Data From Digital Telephone System To PC
   A. Press **1** and RETURN
   B. Press **PAGE DOWN** (**Procomm™**)
      —OR—
      Choose **Receive file** from the **Transfer** menu (**Hyperterminal™**)
   C. Press **1** to choose XMODEM protocol (**Procomm™**)
      —OR—
      Use the mouse to choose XMODEM protocol (**Hyperterminal™**)
   D. Type file name for down-loaded C.O.S. data and include destination drive:\directory (for example, A:\ cust-001)
   E. Press RETURN. The C.O.S. data, as programmed in the digital telephone system, is automatically down-loaded to the computer file
5. Up-Load C.O.S. Data From PC To Digital Telephone System
   A. Press **2** then RETURN
   B. Press **PAGE UP** (**Procomm™**)
      —OR—
      Choose **Send file** from the Transfer menu (**Hyperterminal™**)
   C. Press **1** to choose XMODEM protocol (**Procomm™**)
      —OR—
      Use the mouse to choose XMODEM protocol (**Hyperterminal™**)
   D. Type file name of saved C.O.S. data—include source drive if necessary
   E. Press RETURN. The C.O.S. data, as stored in the computer file, is automatically up-loaded to the digital telephone system
6. From load/save menu, press **3** to down-load currently stored auto dial and speed dial numbers or press **4** to up-load them
8. If transfer is completed properly, screen will display "Xmodem transfer complete, no errors."
9. Return to main menu and log off

Serial Communication Parameters

- ***To enter Serial Communication Parameters menu, press 5 on System Class of Service menu.***

Description: Serial Communication Parameters for Channels 1-4 (labeled A-D on the VDT screen).

NOTE: If you change either the baud rate or data and stop bits, you must also change them on the VDT.

To Program:
1. Press **1-9** to set appropriate baud rate and RETURN
2. Press **10** or **11** for appropriate data and stop bits and RETURN
3. Press **12** to switch to other channel and RETURN
4. Repeat steps one and two for other channel
5. Press **14** to return to previous menu.

C.O.S. Data Printout

- ***To enter C.O.S. Data Printout menu, press 6 on System Class of Service menu.***

Description: You can obtain a printout of your programming decisions.

To Program:
1. Press **1** to print all C.O.S. data and RETURN
2. Press **2** to print system C.O.S. data and RETURN
3. Press **3** to print all line C.O.S. data and RETURN
4. Press **4** to print selected line C.O.S. data and RETURN
5. Press **5** to print all station C.O.S. data and RETURN
6. Press **6** to print selected station data and RETURN
7. Press **7** to print toll restriction data and RETURN
8. Press **8** to RETURN to previous menu.

Set Clock Date / Time

- ***To enter Set Clock Date / Time menu, press 7 on System Class of Service menu.***

Description: The system will keep the time and date.

To Program: Enter the appropriate time, date and year as yy,mm,dd,nn:nn
(for example; 99,12,31,23:59)
NOTE: Use military hours—18:00 = 6 o'clock P.M.)

SMDA Programming

- ***To enter SMDA Programming menu, press 8 on System Class of Service menu.***

Costing Band Assignments

Description: Band assignments determine the priority levels of call costing, from area codes, to zone codes, to office codes.

To Program:

1. Press **1** on SMDA Programming menu and RETURN
2. Press **1** to Assign Office Codes to Bands and RETURN
3. Press **2** to Assign Area Codes to Bands and RETURN
4. Press **3** to Assign Area Codes and Office Codes to Zones and RETURN
5. Press **4** to Assign Entry for Leading Discard Digits and RETURN
6. Press **5** to Delete Entry for Leading Discard digits and RETURN
7. Press **6** to RETURN to previous menu and RETURN.

Set Dial Time Limit

Description: The system does not include dialing time when it records the time of a call for costing. You can program the amount of time that the system ignores for dialing.

To Program:
1. Press **2** on SMDA Programming menu and RETURN
2. Enter time and RETURN.

Set Answer Time Limit

Description: The answer time allows a call to ring and be answered by the called party before the system costs it.

To Program:
1. Press **3** on SMDA Programming menu and RETURN
2. Enter time and RETURN.

Define Department Numbers

Description: This feature determines what departments will be included in call costing reports.

To Program:
1. Press **4** on SMDA Programming menu and RETURN
2. Enter department number and RETURN
3. Enter department ID and RETURN

Assign Stations to Departments

Description: This feature determines what stations will be included in call costing reports.

To Program:
1. Press **5** on SMDA Programming menu and RETURN
2. Enter department number and RETURN
3. Enter Station numbers and RETURN

Account Codes

Description: The digital telephone system uses account codes to identify calls by category or by any other desired grouping. Account codes can be verified or not verified by the system—with verified account codes, the system compares the first three digits of the entered account code with the programmed account code numbers. If no match is found and the account code is optional, the system sounds an error tone through the telephone but does not prevent dialing. If forced entry is enabled, however, the system prevents further dialing until the user enters a matching code.

NOTE: Even if you enable forced account code entry, users can always dial emergency numbers without entering an account code. For more information on account code functions, consult the features chapter in the DSU II system manual, IMI66–132.

To Program:

1. Press **6** on SMDA Programming menu and RETURN
2. Press **1** to Set Account Codes and RETURN
3. Press **2** to Clear Account Codes and RETURN
4. Press **3** to Enable Optional Account Codes With Verify and RETURN
5. Press **4** to Enable Optional Account Codes Without Verify and RETURN
6. Press **5** to Enable Forced Account Codes With Verify and RETURN
7. Press **6** to Enable Forced Account Codes Without Verify and RETURN
8. Press **7** to Disable Account Codes and RETURN
9. Press **8** to Enable Display for Incoming Calls and RETURN
10. Press **9** to Disable Display for Incoming Calls and RETURN
11. Press **10** to Enable Display for Outgoing Calls and RETURN
12. Press **11** to Disable Display for Outgoing Calls and RETURN
13. Press **12** for Account Code Message Display Time and RETURN
14. Press **13** to set Maximum Account Code Length and RETURN
15. Press **14** to Verify Number of Digits and RETURN
16. Press **15** to Set Emergency Numbers and RETURN
17. Press **16** to Clear Emergency Numbers and RETURN
18. Press **17** to Display Emergency Numbers and RETURN
19. Press **18** to Enable or **19** to Disable Secure Account Code Entry and RETURN
20. Press **20** to RETURN to Previous menu and RETURN

Call Cost Table

Description: The system compares local and long distance calls that do not match entries in any exception or banding tables with entries made in call costing table. It then costs those calls accordingly.

To Program:
1. Press **7** on SMDA Programming menu and RETURN
2. Enter Call Cost Table number and RETURN
3. Press **1** to enter Match Digits and RETURN
4. Press **2** to Set Tier 1 time and RETURN
5. Press **3** to Set Tier 1 rate and RETURN
6. Press **4** to Set Tier 2 rate and RETURN
7. Press **5** to Set Surcharge and RETURN
8. Press **6** to Change Call Cost Tables and RETURN
9. Press **7** to RETURN to previous menu and RETURN.

Call Cost Exception Tables

Description: The system first compares all calls to entries in four exception tables; these tables provide the first priority level of call costing.

To Program:
1. Press **8** on SMDA Programming menu and RETURN
2. Press **1** to Add an Exception Entry and RETURN
3. Press **2** to Clear an Exception entry and RETURN
4. Press **3** to RETURN to previous menu and RETURN.

Automatic Reports

Description: The system generates reports automatically for printing whenever it detects that its records storage area is 95 percent full. You can program the system to generate a particular report. The system will generate the reports for printing in the order that you selected at a certain time each day. You can also program the system to delete all printed records except for those it collects during the printing operation.

To Program:
1. Press **9** on SMDA Programming menu and RETURN
2. Press **1** to Set Auto Report Time and RETURN
3. Press **2** to Enable or Disable Station Reports and RETURN
4. Press **3** to Enable or Disable Account Reports
5. Press **4** to Enable or Disable Line Reports
6. Press **5** to Enable or Disable Department Reports and RETURN
7. Press **6** to Enable or Disable All Detail Records and RETURN
8. Press **7** to Enable or Disable Departmental Calling Distribution Reports and RETURN
9. Press **8** to Delete Records and RETURN
10. Press **9** to Display Auto Report Definition and RETURN
11. Press **10** to RETURN to previous menu and RETURN.

SMDA Delete By Attendant

Description: The attendant can delete SMDA records when they exceed storage capacity.

To Program:
1. Press **10** on SMDA Programming menu and RETURN
2. Press **1** to enable, or **0** to disable and RETURN.

SMDA Reports

Description: These reports are printed immediately.

NOTE: For further definitions of SMDA report functions see the features chapter of the DSU II system manual, IMI66–132.

To Program:
1. Press **11** on SMDA Programming menu and RETURN
2. Press **1** for Selected Station Port and RETURN
3. Press **2** for Station Reports and RETURN
4. Press **3** for Account Reports and RETURN
5. Press **4** for Line Reports and RETURN
6. Press **5** for Department Reports and RETURN
7. Press **6** for All Detail Records and RETURN
8. Press **7** for Departmental Calling Distribution Reports and RETURN
9. Press **8** to Display Number of Free Records and RETURN
10. Press **9** to Delete Records (After Next Print) and RETURN
11. Press **10** to Start Printing Report and RETURN
12. Press **11** to Stop Printing Report and RETURN
13. Press **12** to RETURN to previous menu and RETURN.

SMDR Print Parameters

- ***To enter SMDR Printing menu, Press 9 on System Class of Service menu.***

Description: The SMDR feature generates a call record for printing as soon as the system collects the records.

To Program:
1. Press **1** to Enable SMDR Printing With Costing and RETURN
2. Press **2** to Enable SMDR Printing Without Costing and RETURN
3. Press **3** to Disable SMDR Printing and RETURN
4. Press **4** to RETURN to previous menu.

Logical / Physical Assignments—Stations

- ***To enter the Logical / Physical Assignments — Stations menu, Press 10 on the System Class of Service menu.***

Description: You can assign all of the programming attributes of one station to a different port without reassigning all of the features separately.

To Program:
1. Press **1** to Display Current Assignments
2. Press **2** to Assign Station to Port
3. Press **3** to return to previous menu.

Logical / Physical Assignments—Lines

- ***To enter the Logical / Physical Assignments — Lines menu, Press 11 on System Class of Service menu.***

Description: You can assign all of the programming attributes of one line port to a different line port.

To Program:
1. Press **1** to Display Current Assignments
2. Press **2** to Assign Logical to Physical
3. Press **3** to return to previous menu.

Automatic Set Relocation

- ***To enter the Automatic Set Relocation menu, Press 12 on System Class of Service menu***

Description: The system will automatically recognize a station should that station be relocated to a different port. It will keep all of the original station programming and transfer those attributes to the new station location.

To Program:
1. Press **1** to Enable Auto Station Relocation, or press **0** to Disable Auto Station Relocation
2. Press RETURN to enter the change.

Feature Inhibit Programming

- ***To enter Feature Inhibit Programming menu, press 13 on the System Class of Service menu.***

Description: All of the functions on the Feature Inhibit Programming Menu disable the feature.

To Program: Press the number of the feature you wish to disable.

1. Line Group 1
2. Line Group 2
3. Line Group 3
4. Line Group 4
5. Zone Paging 1
6 Zone Paging 2
7 Zone Paging 3
8. All Call
9. Meet Me Page
10. Night Transfer
11. Background Music
12. Voice Announce Block
13. Message Waiting
14. Call Pickup
15. Call Forward
16. Automatic Call Back
17. Station to Station Messaging
18. Line Group Queue
19. Directed Station Hold
20. Call Park Orbit 1
21. Call Park Orbit 2
22. Call Park Orbit 3
23. Call Park Orbit 4
24. Call Park Orbit 5
25. Call Park Orbit 6
26. Call Park Orbit 7
27. Call Park Orbit 8
28. Call Park Orbit 9
29. Call Waiting
30. LCD Messaging

Enable All Inhibited Features

- ***To Enable All Inhibited Features, press 14 on the System Class of Service menu and press Y to confirm.***

LCD Messages

- ***To enter the LCD Messages menu, Press 15 on the System Class of Service menu***

Display Current Messages

Description: Menu will display LCD messages.

To Program:
1. Press **1** on LCD Messages menu and Return
2. Press RETURN to go back to System C.O.S. menu.

Enter A Custom Message

Description: You can create a custom message that will display on a calling station's LCD, " AM SLEEPING," for example.

To Program:
1. Press **2** on LCD Messages menu and RETURN
2. Press message number and RETURN
3. Type message and RETURN
4. Press RETURN to go back to System C.O.S. menu

Enter the BACK AT Message

Description: Will display "back at" time when a station receives LCD message.

To Program:
1. Press **3** on LCD Messages menu and RETURN
2. Press message number and RETURN
3. Press RETURN to go back to System C.O.S. menu.

Enter the CALL Message

Description: Will display a "call" message when a station receives a LCD message.

To Program:
1. Press **4** on LCD Messages menu and RETURN
2. Press message number and RETURN
3. Press RETURN to go back to System C.O.S. menu.

Clear an LCD Message

Description: Will clear a LCD message.

To Program:
1. Press **5** on LCD Messages menu and RETURN
2. Press message number and RETURN
3. Press RETURN to go back to System C.O.S. menu.

Specialized Route Access

- ***To enter the Specialized Routed Access menu, press 16 on System C.O.S. programming***

Specialized Route Access Feature

Description: This feature allows the system to select a line group based on the digits the user has dialed. The system then selects the best route for that call.

To Program:
1. Press **1** on Specialized Routed Access menu and RETURN
2. Press **1** to Enable feature, **0** to Disable.

Assign Line Group Number To Office Code Table

Description: The office code table matches a dialed office code with one of the dialed office codes that you have entered into the table and routes the call over the line group that you have entered for that office code.

To Program:
1. Press **2** on Specialized Routed Access menu and RETURN
2. Press Line Group Number
3. Enter Office Code(s)

Assign Line Group Number To Area Code Table

Description: The area code table matches a dialed area code with one of the area codes that you have entered into the table and routes the call over the line group that you have entered for that area code.

To Program:
1. Press **3** on Specialized Routed Access menu and RETURN
2. Press Line Group Number
3. Enter Area Code(s)

Assign Line Group Number To Special Table

Description: The four special area code tables must first match a dialed area code and then match a dialed office code. When a complete match is found, the system routes the call over the line group that you have assigned to the matched office code in the matched area code table.

To Program:
1. Press **4** on Specialized Routed Access menu and RETURN
2. Press S.R.A. Special Table Number (1–4)
3. Press Line Group Number
4. Enter Office Code(s).

Overflow Line Group

Description: You can assign an overflow line group that the system can use to route calls over when no lines are free in the line group assigned to the matching entry. If you haven't assigned an overflow line group, the system will ring busy if no lines are free.

To Program:
1. Press **5** on Specialized Routed Access menu and RETURN
2. Enter S.R.A. Overflow Line Group (0-4, 0 = none).

Assign Area Code To Special Table

Description: The area code table matches a dialed area code with one of the area codes that you have entered into the table and routes the call over the line group that you have entered for that area code.

To Program:
1. Press **6** on Specialized Routed Access menu and RETURN
2. Enter S.R.A. Special Table Number (1-4)
3. Enter Area Code.

Clear Area Code From Special Table

Description: You can clear an area code from a table with this feature.

To Program:
1. Press **7** on Specialized Routed Access menu and RETURN
2. Enter S.R.A. Special Table Number (1-4).

Assign Insert Digit

Description: You can program the system, on a per–line basis, to insert up to six digits before a dialed number. This feature is useful if the dialed number must match a specific format for the line group being used.

To Program:
1. Press **8** on Specialized Routed Access menu and RETURN
2. Enter Line Group Number
3. Enter S.R.A. Insert Digit (s)

Clear Insert Digit

Description: Clear insert digits with this feature.

To Program:
1. Press **9** on Specialized Routed Access menu and RETURN
2. Enter Line Group Number.

SRA Wait Time

Description: Once a caller begins to dial digits, he or she has a certain period of time in which to dial each new digit.

To Program:
1. Press **10** on Specialized Routed Access menu and RETURN
2. Press **2**, **3**, or **4** for the number of seconds and RETURN

SRA Alternate Line Group

Description: The alternate line groups feature enables the system to try an alternate line group if no lines are available in the original group. Each line group can have one alternate line group. No alternate line groups are assigned by default. SRA alternate line groups are included in database printouts. If digit insertion is programmed, it will be done for the actual line group the call is being routed over.

To Program:
1. Press **16** for Specialized Route Access menu and RETURN
2. Press **11** for SRA Alternate line group and RETURN
3. Press **1–4** for the line group number and RETURN
4. Press **1–4** for the alternate line group number and RETURN

Software Version Number

- ***To display the Software Version of your program, press 17 on the System Class of Service menu.***

Notes

3 Programming The Lines

Using Chapter Three

Chapter Three deals only with the programming of the lines, which means that you are setting the parameters that *will only be true for the individual line programmed*. If you are unsure whether or not you are programming the correct function, check the features chapter in IMI66–132 for a full definition of the features. You should make a record of all your programming decisions —it will help you keep track of what you have done and will help you trouble–shoot any problem that might arise later. When you need to make a record of your programming decisions, use the records sections provided in IMI66–132.

- ***To enter Line Class of Service menu, press 2 on Main menu.***

Line Type

Description: You can use this feature to program the type of line, CO/PABX, for example, that you wish to assign. You must enter a line number after each enable/disable selection.

To Program:
1. Press **1** on Line menu and RETURN
2. Press **1** to Disable a line and RETURN
3. Press **2** to assign an Auxiliary port and RETURN
4. Press **3** to assign a CO/PABX and RETURN
5. Press **4** to return to Previous menu.

Line Group Assignment

Description: You can group outside lines of the same type together for dial–up outgoing access.

NOTE: When you group lines you automatically arrange the system for hybrid operation. Remember, hybrid operation may incur a higher monthly tariff than a key system operation. Ask the local telephone company for details.

To Program:
1. Press **2** on Line menu and RETURN
2. Press **1** to assign to Group 1 and RETURN
3. Press **2** to assign to Group 2 and RETURN
4. Press **3** to assign to Group 3 and RETURN
5. Press **4** to assign to Group 4 and RETURN
6. Press **5** to Clear all Assignments and RETURN
7. Press **6** to return to Previous menu.

Line Dialing Mode

Description: You must select either tone or pulse dial for each line.

To Program:
1. Press **3** on Line menu and RETURN
2. Press **1** for Pulse Dial and RETURN
3. Press **2** for Tone Dial and RETURN
4. Press **3** to return to Previous menu.

Line Privacy Release

Description: A particular line can be programmed with privacy release, meaning that one other station can join that privacy release line at any time during a call. Lines are automatically private unless otherwise programmed.

To Program:
1. Press **4** on Line menu and RETURN
2. Press **1** to Disable Privacy Release and RETURN
3. Press **2** to Enable Privacy Release and RETURN
4. Press **3** to return to Previous menu.

Toll Restriction Table Assignments

NOTE: For further information on Toll Restrictions, see page 45 in this publication.

Description: After you have constructed a toll restriction table, you must assign it to the appropriate line(s).

To Program:
1. Press **5** on Line menu and RETURN
2. Press **1** to Clear Line Toll Restriction Table Assignments and RETURN
3. Press **2** to Assign Line to Toll Restriction Tables and RETURN
4. Press **3** to return to Previous menu.

Line Abandoned Hold Release Time

Description: When a distant party abandons a hold condition and disconnects from a line (hangs up), the central office will send a forward disconnect signal to the digital telephone system. This signal can be either 50 ms. or 350 ms. in length. Find out from the telephone company what the signal length is, and program all of the central office line ports to match it using this programming procedure.

To Program:
1. Press **6** on Line menu and RETURN
2. Press **1** for 350 ms. and RETURN
3. Press **2** for 50 ms. and RETURN
4. Press **3** to return to Previous menu.

Set Up a Line

Description: You can take the parameters from one line and assign them to other lines.

To Program:
1. Press **7** on Line menu and RETURN
2. Enter model line number and RETURN
3. Enter program line number and RETURN
4. Press RETURN to go back to Previous menu.

Assign Name

Description: You can name lines as to their function. Names such as WATS or CO, for example, appearing on an LCD speakerphone display make it easier for the station user to identify a line. A line name can be up to five characters long.

To Program:
1. Press **8** on Line menu and RETURN
2. Press **1** to Assign Name and RETURN
3. Press **2** to Remove a Name and RETURN
4. Press **3** to return to Previous menu

Assign Line to Department

Description: You can group stations into departments and then assign certain lines to those departments so that all stations in a department can access that line.

To Program:
1. Press **9** on Line menu and RETURN
2. Press **1** to Assign Line to Department and RETURN
3. Press **2** to Remove Line from Department and RETURN
4. Press **3** to return to Previous menu

Exclusive Hold

Description: Exclusive Hold prevents a telephone user at one station from picking up a call that a user placed on hold at another station.

To Program:
1. Press **10** on Line menu and RETURN
2. Press **0** to Enable Exclusive Hold for all lines and RETURN

   —OR—

   Press **1** to Disable and RETURN
3. Press RETURN to go back to previous menu

Voice Mail Line ID

NOTE: See index for Department–level programming steps.

Description: When you have included a voice mail system with the digital telephone system, assign voice mail identification numbers to the lines. A voice mail ID number can contain up to a maximum of six digits. A voice mail ID number allows the voice mail equipment to identify which line it is answering, regardless of the voice mail port that answered it.

To Program:
1. Press **11** on Line menu and RETURN
2. Enter Line number and RETURN
3. Enter Voice Mail ID Line.

DISD Assignments

Description: The DISD. feature allows an external party to call an intercom station directly without assistance by the attendant. The system must receive the DISD call on a line that you have programmed to allow this feature. You can program any line to be a DISD. line for both the normal mode of operation and for night transfer.

NOTE: For more detailed definitions of DISD. functions, see the features chapter of IMI66–132.

To Program:
1. Press **12** on Line menu and RETURN
2. Press **1** for DISD Incoming Rings Day and RETURN
3. Press **2** for DISD Incoming Rings Night and RETURN
4. Press **3** for DISD Dial Time and RETURN
5. Press **4** for DISD Assist Station Day and RETURN
6. Press **5** for DISD Assist Station Night and RETURN
7. Press **6** for DVA for DISD and RETURN
8. Press **7** for DVA for DCD and RETURN
9. Press **8** for DISD night digit dialing and RETURN
10. Press **9** for number transfers to department before disconnect and RETURN
11. Press **10** for DISD call waiting tone and RETURN
7. Press **11** to return to Previous menu.

Caller ID Assignments

Description: The central office sends caller ID data over lines that it has assigned to the Caller ID service. After being received and decoded by the external caller ID decoder device, the caller ID information is displayed at a system LCD speakerphone. This function will only work if you have assigned the station to the caller ID service and then arranged the line to ring audibly at that station. The user must be able to answer a call by pressing a button for the ringing incoming line or one that is transferred to the station in order for caller ID to work.

To Program:

1. Press **13** on Line menu and RETURN
2. Press **1** to Assign Caller ID to Lines
3. Press **2** to Remove Caller ID from Lines
4. Press **3** to Assign Caller ID to Stations
5. Press **4** to Remove Caller ID from Stations
6. Press **5** to Define Local Area Code for Dial
7. Press **6** to Define Local Office Codes for Dial
8. Press **7** for Audible First Ring Option
9. Press **8** for Caller ID Distribution Option.

Line Disconnect Supervision

Description: When a station is on line with an outside caller and the caller hangs up, the CO may send a positive disconnect signal to the DSU II. You can enable the positive disconnect supervision feature on a per-line basis. If you enable positive disconnect supervision, when the system receives the CO's positive disconnect signal the system resets the toll restriction, releases the current call record, and creates a new call record in its place.

To Program:

1. Press **14** at the Line C.O.S. menu
2. Enter **1** to Enable Line Disconnect Supervision, 0 to Disable.

Notes

4 Programming The Stations

Using Chapter Four

Chapter Four deals only with the programming of the stations, which means that you are setting the parameters *that will only be true for the individual station programmed*. If you are unsure whether or not you are programming the correct function, check the features chapter of IMI66–132 for a full definition of the features. You should make a record of all your programming decisions—it will help you keep track of what you have done and will help you trouble–shoot any problem that might arise later. When you need to make a record of your programming decisions, use the records sections provided in IMI66-132, or print out C.O.S. data to the printer port for either a hard copy or a text file.

- ***To enter Station Class of Service menu, press 3 on Main menu.***

Set up a Station (Using A Model)

Description: You can set one station's parameters and copy them to other stations.

To Program:
1. Press **1** on Station menu and RETURN
2. Enter Model Station Number and RETURN
3. Enter Program Station Number(s) and RETURN
4. Press RETURN to go back to previous menu.

Assign Name To Station

Description: You can assign individual names or category names to a station. These names will then be displayed by LCD speakerphones when they are called by named stations.

To Program:
1. Press **2** on Station menu and RETURN
2. Enter the station number and RETURN
3. Press **1** to Assign Name and RETURN
4.. Press **2** to Remove Name and RETURN
5. Press **3** to return to previous menu.

Assign Station to A Department

Description: You can group stations into departments that may share similar lines or features.

To Program:
1. Press **3** on Station menu and RETURN
2. Press **1** to Assign Station to a Department and RETURN
3. Press **2** to Assign Station to a Department Overflow Position and RETURN
4. Press **3** to Remove a Station and RETURN
5. Press **4** to return to previous menu.

Assign Station to SOHVA

Description: This feature arranges station ports to originate and / or receive SOHVA calls by assigning SOHVA calling groups to them.

To Program:
1. Press **4** on Station menu and RETURN
2. Enter SOHVA group number and RETURN
3. Enter Station number (s) and RETURN
4. Press RETURN to go back to previous menu.

Line / Intercom Features

- ***To enter Line / Intercom Features menu, press 5 on Station menu.***

Prime Line

Description The station automatically selects the prime line for use when the user goes off hook.

To Program:
1. Press **1** on Line / Intercom menu to Assign Prime Line and RETURN
2. Press **2** to Assign Prime Line Group and RETURN
3. Press **3** to Assign Intercom as Prime Line and RETURN
4. Press **4** to Clear Prime Assignment and RETURN
5. Press **5** to return to previous menu.

Ringing Line Preference

Description When you assign this feature to a station, it will automatically answer a ringing line when its user takes it off hook.

To Program:
1. Press **2** on Line / Intercom menu to Assign Ringing Line Preference and RETURN
2. Press **1** to Enable Ringing Line Preference and RETURN
3. Press **2** to Disable Ringing Line Preference and RETURN
4. Press **3** to return to previous menu.

NOTE: Use of tri–color LED's requires that you program Ringing and Ringing Line Preference at a station.

Line Access Deny

Description You can deny access to certain lines at certain stations.

To Program:
1. Press **3** on Line / Intercom menu to Deny Access and RETURN
2. Press **1** to Enable Line Access Deny and RETURN
3. Press **2** to Disable line Access Deny and RETURN
4. Press **3** to return to previous menu.

Line Originate Deny

Description You can program a station to be able to only answer a line and not be able to call out on it.

To Program:
1. Press **4** on Line / Intercom menu to Originate Line Access and RETURN
2. Press **1** to Enable Line Origination to Line Deny and RETURN
3. Press **2** to Disable line Origination to Line Deny and RETURN
4. Press **3** to return to previous menu.

Idle Line Preference

Description When you enable idle line preference, a station will automatically connect to any assigned and idle line that you have programmed for this purpose.

To Program:
1. Press **5** on Line / Intercom menu to set Idle Line Preference and RETURN
2. Press **1** to Enable Idle Line Preference and RETURN
3. Press **2** to Disable Idle Line Preference and RETURN
4. Press **3** to return to previous menu.

Block Voice Announce Intercom

Description This feature allows a station user to block voice announced intercom calls.

To Program:
1. Press **6** on Line / Intercom menu to Block Voice Announce and RETURN
2. Press **1** to Enable Voice Block and RETURN
3. Press **2** to Disable Voice Block and RETURN
4. Press **3** to return to previous menu.

Station Audible Monitoring

Description The DSS/B.F. at a multiline station provides a visual indication of idle, busy, and ringing status of the monitored stations.

To Program:
1. Press **7** on Line / Intercom menu for Station Audible Monitoring and RETURN
2. Press **1** for Direct Ringing and RETURN
3. Press **2** for Delayed Ringing and RETURN
4. Press **3** to Disable Audible Monitoring and RETURN
5. Press **4** to return to previous menu.

Ringing Assignment

- ***To enter Ringing Assignment menu, press 6 on Station menu.***

Personal Ringing tone

Description You can program stations to ring in one of six distinctive tones.

To Program:
1. Press **1** on Ringing Assignment menu and RETURN
2. Press **1** for Ringing tone 1 and RETURN
3. Press **2** for Ringing tone 2 and RETURN
4. Press **3** for Ringing tone 3 and RETURN
5. Press **4** for Ringing tone 4 and RETURN
6. Press **5** for Ringing tone 5 and RETURN
7. Press **6** for Ringing tone 6 and RETURN
8. Press **7** to return to previous menu.

Day Ringing

Description You must program ringing assignments on a per station basis. Direct ringing rings immediately at a station and delayed ringing rings after a set interval of time.

To Program:
1. Press **2** on Ringing Assignment menu and RETURN
2. Press **1** to Enable Day Direct Ringing and RETURN
3. Press **2** to Disable Day Direct Ringing and RETURN
4. Press **3** to Enable Day Delayed Ringing and RETURN
5. Press **4** to Disable Day Delayed Ringing and RETURN
6. Press **5** to return to previous menu.

Night Ringing

Description You must program ringing assignments on a per station basis. The system will activate special line/station ringing assignments when set for night ringing.

To Program:
1. Press **3** on Ringing Assignment menu and RETURN
2. Press **1** to Enable Night Direct Ringing and RETURN
3. Press **2** to Disable Night Direct Ringing and RETURN
4. Press **3** to Enable Night Delayed Ringing and RETURN
5. Press **4** to Disable Night Delayed Ringing and RETURN
6. Press **5** to return to previous menu.

Distinctive Ringing for ATI

Description Intercom calls that ring at equipment connected through an ATI–D have a different cadence than outside calls have. If needed, you can disable this distinctive ringing feature to make the intercom ring cadence the same as that for outside calls.

To Program:
1. Press **4** and RETURN
2. Press **1** to Enable Distinctive Ringing and RETURN
3. Press **0** to Disable Distinctive Ringing and RETURN

Button Mapping

This table shows the features that may be button mapped on a telephone, including the three letter abbreviation that must be entered. You can display this as reference while in button mapping by entering the ? character at a button prompt.

BLK = Blank Lxx = Line xx Sxx = Station xx DND = Do Not Disturb PRI = Privacy IC2 = 2nd Intercom ITC= Intercom ACC = Account Code SAV = Save ZPx = Zone Page (1-3)	AC = All Call ACB = Auto Callback CF = Call Forward CPx = Call Park (1-9) TGx = Line Group (1-4) VAB = Voice Announce Block TGQ = Line Group Queue DAT = Data EX = Exit Button Mapping

Description: You can assign (map) every programmable button on every electronic telephone. For more information on button mapping see IMI66–132.

To Program:
1. Press **7** on Station menu and RETURN
2. Enter Station Number -
3. Select desired button (Press RETURN until button appears)
4. Enter desired attribute and RETURN
5. Press **CTRL Z** to enter next station or press **CTRL C** to return to Main menu.

Toll Restriction Administration

NOTE: For further information on Toll Restrictions, see the Toll Restriction module in IMI66-132.

Description: After you have created a toll table, you must assign it to the appropriate lines and stations.

To Program:

1. Press **8** on Station menu and RETURN
2. Press **1** for Toll Restriction Table Assignment and RETURN
3. Press **2** for Night Mode Toll Restriction and RETURN
4. Press **3** for System Speed Dial Toll Restriction and RETURN
5. Press **4** for Toll Restriction Override
6. Press **5** to return to previous menu.

Automatic Busy / RNA Call Forwarding

Description: The system can automatically forward busy and ring–no answer intercom calls or transferred outside calls that callers make to one station to a different station for answering. The system sends these calls to any idle station associated with an intercom hunt group or by department with the called station.

NOTE: If you enable this feature, choose tone dialing when you program the system intercom signaling.

To Program:

1. Press **9** on Station menu and RETURN
2. Press **1** to Assign a Hunt Group and RETURN
   a. Press **1** to Enable and RETURN
      Enter the station to forward from and RETURN
      Enter the station to forward to and RETURN
      —OR—
   b. Press **2** to Disable and RETURN
   c. Press **3** to return to previous menu
3. Press **2** for Call Forward RNA and RETURN
   a. Enter number of rings and RETURN
   b. Enter station number (s) and RETURN
4. Press **3** for Call Forward Busy and RETURN
   a. Enter **1** to enable and RETURN
   b. Enter **0** to disable and RETURN
5. Return to previous menu

Miscellaneous Feature Programming

- ***To enter the Miscellaneous Feature Programming menu, press 10 on the Station Class of Service menu.***

Description: All of the features on the Miscellaneous Feature Programming menu are toggle–on toggle–off, or Enable – Disable, except for "All Call Zone Paging," which has the following sub menu

To Program:
1. Press **8** and RETURN
2. Press **1** to clear Assignments and RETURN
3. Press **2** to Assign Receive Zone, and RETURN
4. Press **3** to Assign Originate Zone
5. Press **4** to return to previous menu.

Miscellaneous Feature Programming

To Program:
1. Automatic Privacy Release
2. Line Auto Hold
3. Intercom Auto Hold
4. Thru Dialing/ ATI
5. Executive Override
6. Do Not Disturb Override
7. Service Observing
8. All-Call and Zone Paging
9. Message Wait Originate
10. Head Set Mode
11. Group Call Pickup
12. SOHVA
13. Data Security Ports
14. LCD Call Costs
15. Americom Dynamic Line Keys
16. System Alarm Receive
17. Unobservable Station
18. Voice Mail Transfer on Busy for Station
19. Voice Mail Port
20. Assign Second DSS Console to a Station
21. Americom Soft Keys
22. Display Pager
23. Handset Volume
24. Data Station
25. Data Group
26. Call Forward Outside System
27. Quick Transfer
28. Disconnect Notification
29. Return to Previous Menu

Speakerphone Coefficients

- ***To enter the Speakerphone Coefficients menu, press 11 on the Station Class of Service menu.***

Description: CAUTION: This is a technical services function only; it is not recommended for field service use.

To Program:

1. Press **1** to Read Speakerphone Coefficients
2. Press **2** to Modify Speakerphone Coefficients
3. Press **3** to Save Speakerphone Coefficients
4. Press **4** to return to previous menu.

5 Toll Restriction Table Administration

NOTE: The functions on this menu only create and clear toll tables. For complete information on toll tables see the toll table module in IMI66–132.

- ***To enter the Toll Restriction Table Administration menu, press 4 on the Main menu.***

Build / Modify an Allow Table

Description: An allow table establishes those numbers that will be allowed, as exceptions against deny tables. For example, enter "1800" in an allow table when "1" is denied.

To Program:
1. Press **1** and RETURN
2. Enter Toll Table Number (1-g, A-6)and RETURN
3. Enter Toll Table Entry Number and RETURN
4. Enter Digit (s) and RETURN
5. Press RETURN to go back to previous menu.

Build / Modify a Deny Table

Description: A deny table establishes those numbers that will not be allowed for dialing. For example, enter "1900" to deny any calls to area code 900.

To Program:
1. Press **2** and RETURN
2. Enter Toll Table Number (1-g, A-6) and RETURN
3. Enter Toll Table Entry Number and RETURN
4. Enter Digit (s) and RETURN
5. Press RETURN to go back to previous menu

NOTE: The # sign is used as any digit.

Clear a Table / Entry

Description: This function clears an established toll table.

To Program:
1. Press **3** and RETURN
2. Press **1** to Clear an Entry
   a. Enter Toll Table Number (1-g, A-6) and RETURN
   b. Enter Toll Table Entry Number and RETURN
   c. Press RETURN to go back to previous menu
3. Press **2** to Clear a Table
   a. Enter Toll Table Number and RETURN
   b. Press RETURN to go back to previous menu.

Toll Restriction Programming Steps

This module explains the many different steps involved in programming for Toll Restrictions. It also serves as an excellent example of the occasional need to move from one menu to another in order to completely program a particular function. (If you are unsure about whether you have done all of the necessary programming for a particular function, check the index – in the back of this book – for further references to that function.)

Create The Table

Description: To create the Allow and Deny Toll Tables, press **4** from Main menu.

To Program:
1. Build / Modify an Allow Table
2. Build / Modify a Deny Table
3. Clear a Table / Entry.

Assign Toll Table To A Line

Description: Once you have created the desired *Allow* and *Deny* Tables, you must assign them to the appropriate line (see page32). From Line Class of Service menu, press 5.

To Program:
1. Press **1** to Clear Line Toll Restriction Table
2. Press **2** to Assign Line to Toll Restriction Table.

Assign Toll Table To A Station

Description: After assigning the toll table to a line, you must then assign it to the desired station (s) (see page 42). From Station Class of Service menu, press **8**.

To Program:
1. Press **1** for Toll Restriction Table Assignment
2. Press **2** for Night Mode Toll Restriction
3. Press **3** for System Speed Dial Toll Restriction.

6 VDT Information

VDT Information

- ***To enter the Information menu, press 5 on the Main menu.***

NOTE: The information menu provides explanations about the key functions of your VDT (see the Programming Procedure section of this manual, page 1).

Description: The following is a list of the items found on the help menu.

Special Characters

@ – Prints current menu.
Backspace, delete, rubout – deletes previous character from input line
from input line.
Control D – deletes current input line
Control R – prints current input line
Control S – stops printing
Any Character – starts printing, stopped by Control S.

Toll Restriction Tables are 1-9 and A-G.

Enter Control C to abort and return to Main menu.

Enter RETURN to terminate data input.

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Notes

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